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NOTICE OF ALLOWANCE AND FEE(S) DUE

7500	02/05/2010

Nixon Peabody Clinton Square PO Box 31051

Rochester, NY 14603-1051

EXAMINER ZHENG, LI PAPER NUMBER

1638 DATE MAILED: 02/05/2010

ARTHNIT

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538 434	07/31/2006	Margaret M. Jahn	19603/4252	2309

TITLE OF INVENTION: RECESSIVE PLANT VIRAL RESISTANCE RESULTS FROM MUTATIONS IN TRANSLATION INITIATION FACTOR FIE4E

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	05/05/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further condicated unless corrected maintenance fee notification	form should be used for correspondence including d below or directed oth ions.	or transmitting ig the Patent, a ierwise in Bloc	the ISS dvance o k 1, by (UE FEE and PUBLICATI rders and notification of r a) specifying a new corres				
	NCE ADDRESS (Note: Use Bl		of address)	papa	rs. Each additiona	1 paper	g can only be used for licate cannot be used for such as an assignment dling or transmission.	domestic mailings of the or any other accompanying or formal drawing, must
Nixon Peabody Clinton Square PO Box 31051	7590 02/05	/2010		I he Stat addi tran	eby certify that th	is Feet	of Mailing or Transa s) Transmittal is being ficient postage for firs ISSUE FEE address I) 273-2885, on the da	nission deposited with the United t class mail in an envelope above, or being facsimile tte indicated below.
Rochester, NY 14	1603-1051							(Depositor's name)
				_				(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.		CONFIRMATION NO.
10/538,434 TITLE OF INVENTION EIF4E	07/31/2006 : RECESSIVE PLANT	VIRAL RES	ISTANCI	Margaret M. Jahn E RESULTS FROM MUT	ATIONS IN TRA	ANSLA	19603/4252 TION INITIATION	2309 FACTOR
APPLN. TYPE	SMALL ENTITY	ISSUE FEE	DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755		\$300	\$0		\$1055	05/05/2010
EXAMI	NER	ART UN	IT	CLASS-SUBCLASS				
ZHENO	G, LI	1638		800-279000	'			
"Fee Address" indic PTO/SB/47; Rev 03-02 Number is required. 3. ASSIGNEE NAME AN	endence address (or Cha 7/122) attached. cation (or "Fee Address" 2 or more recent) attach ND RESIDENCE DATA ess an assignee is identi in 37 CFR 3.11. Comp	nge of Corresponding of Corresponding of Corresponding to Corresponding to the Corresponding	n istomer IED ON	2. For printing on the p (f) the amme of up to or agents OR, alternati (2) the name of a single registered attorney or a listed, no name will be THE PATIENT (print or ty) data will appear on the p T a substitute for filing an (B) RESIDENCE: (CITY)	3 registered paten ely, 2 firm (having as a gent) and the nam neys or agents. If printed. e) tent. If an assign assignment.	memb es of u no nan	er a 2p to p to lee is 3	scument has been filed for
Please check the appropria	ate assignee category or	categories (wil	not be p	rinted on the patent):	Individual 🗖 Co	orporati	ion or other private gro	up entity Government
4a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies			4	b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	i. Form PTO-2038	is atta	iched.	
	SMALL ENTITY statu	s. See 37 CFR		☐ b. Applicant is no lon				
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if requeecords of the United Sta	iired) will not b tes Patent and T	e accepte rademar	ed from anyone other than t k Office.	ne applicant; a regi	stered	attorney or agent; or th	e assignee or other party in
Authorized Signature					Date			
Typed or printed name Registration No								
This collection of informa an application. Confidenti submitting the completed this form and/or suggestic Box 1450, Alexandria, Vi Alexandria, Virginia 2231	tion is required by 37 C iality is governed by 35 application form to the ons for reducing this bur rginia 22313-1450. DC 3-1450.	FR 1.311. The U.S.C. 122 and USPTO. Time den, should be O NOT SEND F	informati I 37 CFR will vary sent to the EES OR	on is required to obtain or r 1.14. This collection is est depending upon the indiv the Chief Information Office COMPLETED FORMS TO	etain a benefit by t imated to take 12 i idual case. Any co r, U.S. Patent and D'THIS ADDRESS	he pub minuter omment Trader S. SEN	lic which is to file (and s to complete, includin is on the amount of tir nark Office, U.S. Deps D TO: Commissioner I	by the USPTO to process) g gathering, preparing, and ne you require to complete atment of Commerce, P.O. for Patents, P.O. Box 1450,

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10/538,434	07/31/2006	Margaret M. Jahn	19603/4252 2309	
75	90 02/05/2010		EXAM	UNER
Nixon Peabody			ZHEN	IO, LI
Clinton Square			ART UNIT	PAPER NUMBER
PO Box 31051 Rochester, NY 146	603-1051		1638 DATE MAII ED: 02/05/201	0

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 333 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 333 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)
Examiner-Initiated Interview Summary	10/538,434	JAHN ET AL.
Examiner-induced interview duminary	Examiner	Art Unit
	LI ZHENG	1638
All Participants:	Status of Application:	_
(1) <u>LI ZHENG</u> .	(3)	
(2) Michael Goldman.	(4)	
Date of Interview: 27 January 2010	Time: 3:00pm	
Type of Interview: ☐ Telephonic ☐ Video Conference ☐ Personal (Copy given to: ☐ Applicant ☐ Applic Exhibit Shown or Demonstrated: ☐ Yes If Yes, provide a brief description:	cant's representative)	
Part I.		
Rejection(s) discussed:		
Claims discussed: 50-52 and 54-67		
Prior art documents discussed: none		
Part II. SUBSTANCE OF INTERVIEW DESCRIBING THE GENIS Applicants agreed on the Examiner's amendments attached with		S DISCUSSED:
Part III.		
It is not necessary for applicant to provide a separate directly resulted in the allowance of the application. To of the interview in the Notice of Allowability. It is not necessary for applicant to provide a separate did not result in resolution of all issues. A brief summa	ne examiner will provide a writton record of the substance of the	en summary of the substance interview, since the interview
/Li Zheng/ Examiner, Art Unit 1638	Applicant/Applicant's Representat	ive Signature – if appropriate)
	*	'

	Application No.	Applicant(s)	
	10/538.434	JAHN ET AL.	
Notice of Allowability	Examiner	Art Unit	
	LI ZHENG	1638	
— The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-83) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commu IGHTS. This application is s	this application. If not include inication will be mailed in due	ed course. THIS
1. This communication is responsive to <u>10/14/09</u> .			
2. The allowed claim(s) is/are 50-52 and 54-67.			
Acknowledgment is made of a claim for foreign priority ur a)		or (f).	
 Certified copies of the priority documents have 			
Certified copies of the priority documents have	• • • • • • • • • • • • • • • • • • • •		
Copies of the certified copies of the priority do	cuments have been received	I in this national stage applica	tion from the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the rec	quirements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			IOTICE OF
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.		
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Review	v (PTO-948) attached	
1) hereto or 2) to Paper No./Mail Date			
(b) including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or	in the Office action of	
Identifying Indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	.84(c)) should be written on the he header according to 37 CF	e drawings in the front (not the R 1.121(d).	back) of
DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			Note the
Attachment(s) 1. Notice of References Cited (PTO-892)	5 □ Notice of Int	formal Patent Application	
Notice of Praftperson's Patent Drawing Review (PTO-948)	_	ummary (PTO-413),	
	Paper No./	Mail Date <u>20100128</u> .	
Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	7. 🛛 Examiner's	Amendment/Comment	
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🔲 Examiner's	Statement of Reasons for Allo	owance
	9. 🗖 Other	-	

Application/Control Number: 10/538,434 Page 2

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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. Authorization for this examiner's amendment was given in a telephone interview with Michael Goldman on 1/27/10.

The application has been amended as follows:

50. (Currently Amended) A method of imparting virus resistance to plants, said method comprising:

providing a nucleic acid molecule encoding a polypeptide at least 95 percent similar identical to a non-mutant translation initiation factor eIF4E of SEQ ID NO:2 and containing at least one substitution of at least one amino acid residue of SEQ ID NO:2 selected from the group consisting of T51A, P66T, V67E, K71R, L79R, G107P, and D109R, and

transforming a plant with the nucleic acid molecule under conditions effective to yield a transgenic plant that overexpresses said translation initiation factor eIF4E, wherein said method is effective in imparting virus resistance to the transgenic plant.

- 59. (Currently Amended) The method according to claim 50, wherein the nucleic acid molecule encodes a polypeptide is at least 95 percent eimilar identical to translation initiation factor eIF4E of SEQ ID NO:1.
- (Currently Amended) The method according to claim 50, wherein the polypeptide has the amino acid sequence of SEQ ID NO: 2 modified to contain at

Application/Control Number: 10/538,434

Art Unit: 1638

least one substitution of at least one amino acid residue of SEQ ID NO: 2 selected from

the group consisting of T51A, P66T, V67E, K71R, L79R, G107P and D109R.

Status of Rejections

All the rejections are withdrawn in light of the claims amendments and this amendment.

Allowable Subject Matter

Claims 50-52 and 54-67 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li Zheng whose telephone number is 571-272-8031.

The examiner can normally be reached on Monday through Friday 9:00 AM - 5:30 PM FST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor. Anne Marie Grunberg can be reached on 571-272-0975. The fax phone

Art Unit: 1638

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anne R Kubelik/ Primary Examiner, Art Unit 1638